

Appln No. 10/737,416
Amndt. dated October 27, 2005
Reply to Office Action of June 19, 2005

PATENT

REMARKS/ARGUMENTS

Claims 1-31 remain pending in this application. Claims 5-26 and 31 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 1-4 and 27-30 stand rejected under 35 U.S.C. 102(e) as being anticipated by Yamauchi (US PAT No. 6,356,141).

Claims 1 and 27 are amended to clarify their respective languages and to more fully define their respective inventions. Claims 3-4, 10-12, 15-16, 19-21, and 31 are likewise amended. Reconsideration of the rejection of claims 1-4 and 27-30 is respectfully requested in view of the foregoing amendments and the following arguments.

In rejecting claim 1, the Examiner refers to Fig. 1 of Yamauchi. As seen from this Figure, amplifier 40 maintains voltage V_m near voltage of node N_n :

".....an operational amplifier 40 which detects the bias voltage V_m of the cable 20 for controlling the gate voltage of the first NMOS replica transistor 36 thereby to establish correspondence between the voltage of the reference node N_n and the bias voltage V_m , and for providing the gate voltage V_{gn} thus controlled to the gate electrode of the NMOS drive transistor 14...." (4:50-56)

However, in Yamauchi, the voltage at the drain terminal of transistor 14, which acts as a current sink, is not maintained constant. Therefore, as the resistance of cable 20 varies, the voltage at the drain terminal of transistor 14 also varies. In contrast, claim 1 recites, in part, "a first voltage regulating circuit coupled to the current sinking circuit and the current steering circuit at a first node adapted to maintain a voltage that remains constant as a resistance of an external load coupled between the first and second terminal varies". In other words, in claim 1, the voltage at the node that couples the current sinking circuit to the current steering circuit (such as node N_{10} of Fig. 2 of the present application) is maintained at a nearly constant voltage (using

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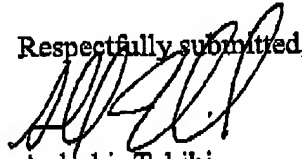
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voltage regulating circuit 22) even as the resistance of external load (R_L in Fig. 2) varies. Claim 1 is thus allowable over Yamauchi for at least the above reason. Claims 2-26 are thus allowable for at least the same reasons as is claim 1. Claim 27 and its dependent claims 28-31 are allowable for at least the same reasons as is claim 1.

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at (650) 752-2424.

Respectfully submitted,



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